

## ABSTRACT

To provide a rectifying device equipped with a carrier transporter excellent in high frequency responsiveness and heat resistance, an electronic circuit using the same, and a method of manufacturing the rectifying device. The rectifying device includes a pair of electrodes, and a carrier transporter arranged between the pair of electrodes and composed of one or multiple carbon nanotubes. In order that a first interface between one electrode of the pair of electrodes and the carrier transporter and a second interface between the other electrode of the pair of electrodes and the carrier transporter may have different barrier levels, connection configuration of them are made different.